

RECORDS OF WATER BEETLES FROM MANCHURIA AND SIBERIA

(Coleoptera: Dytiscidae, Hydrophilidae)

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In the July, 1946 number of the *Annals and Magazine of Natural History* (not actually published until June, 1947), J. Balfour-Browne gave a report on the Manchurian water beetles I had purchased in 1938-40 from their collector, Michael Weymarn. Unknown to us, Per Brinck of Lund had also obtained part of Weymarn's catches, and his paper was published in December, 1946.

The two papers list 84 species and subspecies of Haliplidae, Noteridae, Dytiscidae, Gyrinidae and Hydrophilidae, but the total is subject to change for it is clear that the authors are not always in agreement in their identifications, and some of Brinck's records were taken from the literature. The Hydrophilidae in Brinck's Manchurian collection were determined by the late A. d'Orchymont.

The present paper records some material not available before¹, adds one species omitted by error from Balfour-Browne's list, and gives keys to a few species. All the beetles are from Manchuria, except one *Hydrochara liber* (Sharp) from Siberia, which was loaned by Henry Dietrich of Cornell University.

DYTISCIDAE

ILYBIUS LATERALIS (Gebler)

Harbin, 16.viii.1940 (M. A. Weymarn)

ILYBIUS CINCTUS Sharp and/or I. ANGUSTULUS Régimbart

Harbin, 16.viii.1940 (M. A. Weymarn), 8 ♂♂, 15 ♀♀; Chenghoutze station near Harbin, 18.vi.1939 (A. S. Loukashkin), 2 ♂♂, 5 ♀♀; Mukden, 14.viii.1923 (E. C. Van Dyke), 3 ♂♂, 9 ♀♀.

These small yellow-margined species, the *apicalis* complex, are greatly in need of revision, as remarked by Brinck. On the basis of specimens identified for me by Balfour-Browne, I offer the following key. In his text he remarks on the difficulty of separating *apicalis* and *angustulus*, yet from the material before me I can not distinguish between *angustulus* and *cinctus*, both sensu Balfour-Browne.

1. Hind coxal plates with fine irregular, impressed lines and punctures, in addition to their regular surface sculpture; apex of prosternal process not at all acuminate, almost blunt; hind tarsi of male finely margined along outer edge; parameres broadly rounded apically (fig. 10 in Balfour-Browne's paper); sixth abdominal sternite of female barely at all compressed but with a weak triangular incision at apex.....*lateralis*
- Hind coxal plates with fine regular surface reticulation only; apex of prosternal process acuminate; hind tarsi of male not margined externally; parameres rather narrow, apically produced into a long process (fig. 8 in Balfour-Browne's paper); sixth abdominal sternite of female slightly compressed but not incised at apex.....2
2. Distance between hind coxal plate and middle coxa narrow, equal to $\frac{1}{4}$ of width of hind coxal plate measured along same line; median line of prosternum and its process less angulate, much more transversely rounded, less laterally compressed; pale margin of elytra narrower at base, where it is about as wide as a front tibia, or about $\frac{3}{4}$ the width of a compound eye*apicalis*
- Distance between hind coxal plate and middle coxa greater, equal to a little more than $\frac{1}{3}$ rd width of hind coxal plate; median line of prosternum and its process more sharply angulate, less rounded, more laterally compressed; pale margin of elytra broader, fully as wide as a hind tibia, slightly wider than a compound eye.....*cinctus* and *angustulus*

RANTUS SUTURALIS (MacLeay)

Chenghoutze station near Harbin, 18.vi. 1939 (A. S. Loukashkin), 1 ♀.

ERETES STICTICUS (Linnaeus)

Chenghoutze station near Harbin, 18.vi.1939 (A. S. Loukashkin), 1 ♂.

HYDROPHILIDAE

HYDROCHARA AFFINIS (Sharp)

Mukden, 13.viii.1923 (E. C. Van Dyke), 3 ♂ ♂, 7 ♀ ♀; Chenghoutze station near Harbin, 18.vi.1939 (A. S. Loukashkin), 2 ♂ ♂.

HYDROCHARA LIBER (Sharp)

Hydracharis libera Sharp, 1884. Trans. Ent. Soc. London, 1884 (4): 450.

This species was inadvertently omitted from Balfour-Browne's list. The following specimens are before me:

Weishaha, vi-vii. 1939 (M. Weymarn), 2 ♂ ♂, 4 ♀ ♀; Hsiaoling, vii. 1939 (M. Weymarn), 1 ♂. 1 ♀; Mukden, 13. viii. 1923 (E. C. Van Dyke), 1 ♀.

Also 1 ♂ labeled "Krasnaja Rjetschka bei Chabarowsk, leg Babiy, 1917" (= Khabarovsk, Siberia), from the Cornell University collection.

H. liber may be separated from *H. affinis* as follows:

1. Apex of sternal keel blunt, laterally compressed, carinate, not reaching beyond middle of 1st abdominal sternite; legs reddish; parameres of male genitalia produced inward and almost touching, just before apices.*affinis*
- Apex of sternal keel spinose, acuminate, reaching to hind margin of 1st abdominal sternite; legs black or piceous; parameres straight, dorsoventrally flattened and blade-like apically.....*liber*

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1946. Waterbeetles from Manchuria. With some zoogeographical remarks. *Opuscula Ent.*, 11:146-156, 1 text fig. [Published December 21, 1946.]

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1884. The water-beetles of Japan. *Trans. Ent. Soc. London*, 1884 (4): 439-464.

¹ Note also *Halipilus* (*Haliplinus*) *steppensis* Gupignot, described as allied to *H. apicalis* Thomson; and *Helophorus* (*Empleurus*) *pardakoffi* Stocklein, near *H. rufipes* Bosc. In each case the type locality is "Charbin", Manchuria. These species are described on pages 108 and 268, respectively, of *Entomologische Arbeiten aus dem Museum G. Frey*, Bd. 5, Heft 1; published April 10, 1954.

JURUPA ENTOMOLOGY CLUB

The Jurupa Entomology Club was organized at the University of California at Riverside on October 16, 1953. The purpose of the club is to promote the study of fundamental entomology and to cultivate friendly relations among those interested in the science of entomology. Membership is open to anyone interested in the study of insects. Regular meetings are held on the U.C.R. campus on the first Wednesday (7:30 p.m.) of each month. In addition to the monthly meetings the organization sponsors field collecting trips. During the past year the group has gone on outings to Andreas Canyon, Deep Creek, Wrightwood, Cottonwood Springs, and twice into southern Arizona. The evening meetings have contained many discussions on insect collecting, classification, ecology, and biology and numerous specimens have been exhibited. Also, several outside speakers and movies have been presented at the meetings. During the first year the club, with P. H. Timberlake as president, has grown from 15 to about 25 active members.—L. D. Anderson, *Secretary*.